



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**D3067-1**  
**Job Sheet 170511**



1

Part No: D3067-1

Job Qty: 100 ea

Part Name: End Plate



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/16/18

Job Tracking No:

Due Date: 1/31/18

Created By: Mario Poulin

Type: Stock

Description:

Note: DWG REV A IPP: 03.01.21 Remove step 6 (Deburr) KJ IPP Rev:B Now on Water jet 06-06-16 JLM

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty     | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off      |
|-------|--------------------|---------|------------|----------|-----------|---------|-----------------------|-----------|---------------|
|       |                    |         |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |               |
| 90    | Start up Operation | 100 Ea  | 1/30/18    | 1/30/18  | 0.00      | 0.00    | Start Up Waterjet     |           | SC 18/01/22   |
| 100   | Waterjet           | 100 pcs | 1/30/18    | 1/30/18  | 0.00      | 1.33    | Waterjet1             |           | SC 18/01/22   |
| 120   | QC                 | 100 pcs | 1/30/18    | 1/30/18  | 0.00      | 0.00    | QC8                   |           | 38            |
| 130   | Brake NC           | 100 pcs | 1/31/18    | 1/31/18  | 0.00      | 0.79    | Brake NC 1            |           | DAS 3-89      |
| 140   | QC                 | 100 pcs | 1/31/18    | 1/31/18  | 0.00      | 0.00    | QC5                   |           | 38            |
| 150   | Packaging          | 100 pcs | 1/31/18    | 1/31/18  | 0.00      | 0.00    | Packaging3            |           | 3-89          |
| 160   | QC21-SA            | 100 Ea  | 1/31/18    | 1/31/18  | 0.00      | 0.00    | QC21                  |           | Chel 18/02/01 |

W01003

Part Op 100 - 1-Cut as per Dwg D3067  
Descriptions: 130 - Bend as per Dwg D3067  
150 - \*\*\* STOCK IN STEP CELL\*\*\*

DAS  
21  
3-89

FEB 02 2018

### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated | Std Qty |
|-----------------------|----------------|----------|-----------|-----------|---------|
| 90-Start up Operation | M5052H32S.063  | 6        | 45        | 0         | 0       |
|                       | 5009786        | 6.25     |           |           |         |

### Part Specifications

| Spec No | Description | Target/Tolerance        | Limits         | Type  | Special Comments |
|---------|-------------|-------------------------|----------------|-------|------------------|
| 1       | End Plate   | 2.900inches $\pm$ 0.010 | 2.910<br>2.890 | 2903  |                  |
| 2       | End Plate   | 2.749inches $\pm$ 0.010 | 2.759<br>2.739 | 2,750 |                  |

Plex 1/16/18 4:30 PM dart.poulin.mario

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

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| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                          | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                             | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Cross tube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> |                                   |                                   |                                       | Skid-tube <input type="checkbox"/>     | Cross tube <input type="checkbox"/> | Water Jet <input type="checkbox"/>    | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/>       | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>          | Thermoforming <input type="checkbox"/>    | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>               | Large Fab <input type="checkbox"/>  | Composite <input type="checkbox"/>           | Supplier <input type="checkbox"/>         |                                                |                                        |                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |                                 |                                                |                                                 |                                        |                                |                                      |                                   |                                        |                                     |                                                          |                                             |                                      |                                        |  |
| Skid-tube <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| Machining <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Small Fab <input type="checkbox"/>                       | Prod. 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Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Quality <input type="checkbox"/>            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                   |                                   |                                       |                                        |                                     |                                       |                                      |                                    |                                          |                                             |                                           |                                           |                                    |                                              |                                              |                                     |                                              |                                           |                                                |                                        |                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |                                 |                                                |                                                 |                                        |                                |                                      |                                   |                                        |                                     |                                                          |                                             |                                      |                                        |  |
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| Large Fab <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| Description Work Order Dev                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                          | <div style="transform: rotate(-15deg);"> <b>Job No: 170511</b><br/> <b>Start up Operation 01/22/18</b> </div> <div style="transform: rotate(-15deg);"> <b>Change No:</b><br/> <b>Operation:</b><br/> <b>Revision:</b><br/> <b>Original Serial #: S034373</b><br/> <b>D3067-1</b> </div> <div style="text-align: center;"> <b>End Plate</b><br/> <br/> <b>S034373</b><br/> <b>DART AEROSPACE</b> </div> <div style="transform: rotate(-15deg);"> <b>Dart Aerospace Ltd.</b><br/>           1270 Aberdeen Street<br/>           Hawkesbury, ON K6A 1K7<br/>           CANADA<br/>           TEL: 1 613 632-5200<br/>           Email: sales@dartaero.com<br/>           www.dartaerospace.com         </div> |                                             | Completed By                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                   |                                   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| <b>Root Cause</b><br><table style="width:100%;"> <tr> <td>Environment <input type="checkbox"/></td> <td>No Re-verification <input type="checkbox"/></td> </tr> <tr> <td>Design <input type="checkbox"/></td> <td>Operator <input type="checkbox"/></td> </tr> <tr> <td>Doc/Data <input type="checkbox"/></td> <td>Offset/Setup <input type="checkbox"/></td> </tr> <tr> <td>Equip/Tooling <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> </tr> <tr> <td>Handling/Pre <input type="checkbox"/></td> <td>Training <input type="checkbox"/></td> </tr> <tr> <td>Material <input type="checkbox"/></td> <td>Use for Testing <input type="checkbox"/></td> </tr> <tr> <td>Internal Transport <input type="checkbox"/></td> <td>Poor Information <input type="checkbox"/></td> </tr> <tr> <td>Tribal Knowledge <input type="checkbox"/></td> <td>Rushing <input type="checkbox"/></td> </tr> <tr> <td>LOA <input type="checkbox"/></td> <td>Product Improvement <input type="checkbox"/></td> </tr> <tr> <td>Substation <input type="checkbox"/></td> <td>Process Improvement <input type="checkbox"/></td> </tr> <tr> <td>Past Expiry Date <input type="checkbox"/></td> <td>Manufacturing Process <input type="checkbox"/></td> </tr> <tr> <td>Misidentified <input type="checkbox"/></td> <td>Past Due <input type="checkbox"/></td> </tr> </table> |                                                          | Environment <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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type="checkbox"/> | Offset/Setup <input type="checkbox"/> | Equip/Tooling <input type="checkbox"/> | Supplier <input type="checkbox"/>   | Handling/Pre <input type="checkbox"/> | Training <input type="checkbox"/>    | Material <input type="checkbox"/>  | Use for Testing <input type="checkbox"/> | Internal Transport <input type="checkbox"/> | Poor Information <input type="checkbox"/> | Tribal Knowledge <input type="checkbox"/> | Rushing <input type="checkbox"/>   | LOA <input type="checkbox"/>                 | Product Improvement <input type="checkbox"/> | Substation <input type="checkbox"/> | Process Improvement <input type="checkbox"/> | Past Expiry Date <input type="checkbox"/> | Manufacturing Process <input type="checkbox"/> | Misidentified <input type="checkbox"/> | Past Due <input type="checkbox"/> | <table style="width:100%;"> <tr> <td>Cracks <input type="checkbox"/></td> <td>Inspection Incomplete <input type="checkbox"/></td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave <input type="checkbox"/></td> <td>Contamination <input type="checkbox"/></td> </tr> <tr> <td>Cuffs <input type="checkbox"/></td> <td>Countersink <input type="checkbox"/></td> </tr> <tr> <td>Crushing <input type="checkbox"/></td> <td>Cut Too Short <input type="checkbox"/></td> </tr> <tr> <td>Heat Treat <input type="checkbox"/></td> <td>Instructions Incomplete/Unclear <input type="checkbox"/></td> </tr> <tr> <td>Wave/Twist in Tube <input type="checkbox"/></td> <td>Drill Holes <input type="checkbox"/></td> </tr> <tr> <td>Marks/Chatter <input type="checkbox"/></td> <td></td> </tr> </table> |  |  |  | Cracks <input type="checkbox"/> | Inspection Incomplete <input type="checkbox"/> | Crimp/Kink/Ripple/Wave <input type="checkbox"/> | Contamination <input type="checkbox"/> | Cuffs <input type="checkbox"/> | Countersink <input type="checkbox"/> | Crushing <input type="checkbox"/> | Cut Too Short <input type="checkbox"/> | Heat Treat <input type="checkbox"/> | Instructions Incomplete/Unclear <input 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| Environment <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| Handling/Pre <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  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| Material <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| Internal Transport <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| Tribal Knowledge <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| LOA <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| Substation <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| Past Expiry Date <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| Misidentified <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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| Cracks <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| Crimp/Kink/Ripple/Wave <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| Cuffs <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| Crushing <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| Heat Treat <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| Wave/Twist in Tube <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| Marks/Chatter <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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